

Table 9.1 - Price of Fuels Delivered to Electric Generators

(2000 Dollars per Million Btu)

	<u>1980</u>	<u>1990</u>	<u>1999</u>	<u>2000</u>	<u>2010</u>	<u>2020</u>
Distillate Fuel		NA	4.22	6.89	5.23	5.87
Residual Fuel		4.10	2.45	4.11	3.60	3.81
Natural Gas		2.87	2.64	4.41	3.38	3.87
Steam Coal		1.80	1.22	1.20	1.05	0.97
Fossil Fuel Average ¹		2.09	1.51	1.88	1.61	1.85

Sources: EIA, *Annual Energy Outlook 2002*, DOE/EIA-0383(2002) (Washington, D.C., December 2001), Table A3, and EIA, *Electric Power Monthly*, Table 26, <http://www.eia.doe.gov/cneaf/electricity/epm/epmt26p1.html>.

Note:

¹ Since 1999, includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators. Weighted average price.

Table 9.2 - Prices of Electricity Sold

(2000 cents per Kilowatthour)

	<u>1980</u>	<u>1990</u>	<u>1999</u>	<u>2000</u>	<u>2010</u>	<u>2020</u>
Price by End-Use Sector						
Residential	10.2	9.7	8.3	8.3	7.6	7.7
Commercial	10.3	9.1	7.3	7.5	6.8	6.9
Industrial	7.0	5.9	4.4	4.6	4.3	4.5
Transportation/Other ¹	9.0	7.9	7.1	7.4	6.2	6.1
End-Use Sector Average ²	8.8	8.1	6.7	6.9	6.3	6.5
Price by Service Category						
Generation	NA	NA	4.1	4.3	3.7	3.9
Transmission	NA	NA	0.6	0.6	0.7	0.7
Distribution	NA	NA	2.0	2.0	1.9	1.9

Sources: EIA, *Annual Energy Outlook 2002*, DOE/EIA-0383 (2002), (Washington, D.C., December 2001), Table A8 and EIA, *Annual Energy Review 2000*, DOE/EIA-0384(2000) (Washington, D.C., August 2001), Table 8.15.

Notes:

¹ Public street and highway lighting, other sales to public authorities, sales to railroads and railways and interdepartmental sales.

² Data for 1980 - 2000 are for selected Class A utilities whose electric operating revenues exceeded \$100 million during the previous year. Prices represent average revenue per kilowatthour.

Table 9.3 - Revenue from Electric Utility Retail Sales by Sector

(Millions of 2000 Dollars)

	<u>1980</u>	<u>1990</u>	<u>1999</u>	<u>2000</u>	<u>2010</u>	<u>2020</u>
Residential	72,883	89,476	95,035	99,019	109,668	128,744
Commercial	50,127	68,143	80,592	85,800	100,300	124,062
Industrial	56,683	55,470	46,552	49,266	52,890	63,675
Transportation/Other ¹	6,651	7,285	1,207	1,332	1,426	1,952
All Sectors ²	186,345	220,372	223,386	235,417	264,284	318,433

Sources: Calculated from EIA, *Annual Energy Outlook 2002*, DOE/EIA-0383 (2002), (Washington, D.C., December 2001), Table A8 and EIA, *Annual Energy Review 2000*, DOE/EIA-0384(2000) (Washington, D.C., August 2001), Tables 8.12 and 8.15.

Notes:

¹ Other included public street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales until 1998, when included in Commercial. Transportation electricity use reporting starts in 1999.

² Since 1999, includes nonutility sales of electricity to utilities for distribution to end-users. Beginning in 1996, also includes sales to ultimate consumers by power marketers.

Table 9.4 - Revenue from Sales to Ultimate Consumers by Sector, Census Division, and State, 2000

(Million Dollars)

Census Division State	Residen- tial	Commer- cial	Industrial	Other ¹	All Sectors ²	Census Division State	Residen- tial	Commer- cial	Industrial	Other ¹	All Sectors ²
New England	4,613	4,499	2,083	216	11,410	East South Central	6,814	4,321	4,469	357	15,962
Connecticut	1,264	1,106	425	57	2,852	Alabama	2,028	1,254	1,357	48	4,687
Maine	467	380	314	19	1,178	Kentucky	1,279	717	1,136	146	3,277
Massachusetts	1,850	2,102	864	99	4,914	Mississippi	1,191	734	657	70	2,652
New Hampshire	481	408	238	16	1,143	Tennessee	2,316	1,617	1,320	93	5,346
Rhode Island	301	301	122	20	743	West South Central	13,920	8,468	7,386	1,409	31,183
Vermont	251	203	120	6	579	Arkansas	1,109	519	726	46	2,399
Middle Atlantic	12,823	13,828	4,961	1,416	33,027	Louisiana	2,127	1,308	1,599	195	5,229
New Jersey	2,522	3,027	1,013	61	6,624	Oklahoma	1,380	805	570	157	2,912
New York	6,010	7,562	1,389	1,206	16,167	Texas	9,305	5,835	4,491	1,011	20,642
Pennsylvania	4,291	3,238	2,559	149	10,237	Mountain	5,396	4,552	2,905	399	13,252
East North Central	13,635	11,460	10,065	1,002	36,161	Arizona	2,096	1,572	631	131	4,431
Illinois	3,546	3,207	2,043	549	9,345	Colorado	1,025	998	423	81	2,528
Indiana	1,967	1,214	1,829	58	5,068	Idaho	377	300	262	15	953
Michigan	2,618	2,832	1,898	100	7,449	Montana	254	213	261	2	729
Ohio	4,002	3,102	3,237	240	10,581	Nevada	685	441	560	29	1,715
Wisconsin	1,502	1,104	1,057	54	3,717	New Mexico	413	471	257	96	1,237
West North Central	6,467	4,274	3,635	406	14,781	Utah	410	412	265	36	1,123
Iowa	1,007	551	665	95	2,319	Wyoming	137	145	246	10	537
Kansas	959	782	465	48	2,254	Pacific Contiguous	11,395	11,443	6,345	562	29,745
Minnesota	1,400	736	1,319	56	3,511	California	8,629	9,502	4,594	380	23,105
Missouri	2,084	1,508	712	67	4,370	Oregon	1,071	774	582	34	2,460
Nebraska	545	382	263	103	1,292	Washington	1,695	1,166	1,170	149	4,180
North Dakota	218	155	121	18	512	Pacific Noncontiguous	666	668	527	34	1,895
South Dakota	254	161	90	19	523	Alaska	212	219	78	26	535
South Atlantic	22,481	14,894	6,994	1,379	45,748	Hawaii	454	450	448	8	1,360
Delaware	305	239	134	7	685	U.S. Total	98,209	78,405	49,369	7,179	233,163
District of Columbia	130	629	13	26	798						
Florida	7,696	4,511	913	405	13,526						
Georgia	3,386	2,401	1,481	135	7,404						

Maryland	1,905	1,691	417	76	4,089
North Carolina	3,709	2,345	1,569	144	7,767
South Carolina	1,916	1,110	1,246	60	4,332
Virginia	2,823	1,598	804	518	5,742
West Virginia	610	371	417	8	1,405

Source: EIA, *Electric Sales and Revenue 2000* Data Tables, http://www.eia.doe.gov/cneaf/electricity/esr/esr_tabsh.html , Table 1c.

Notes:

¹ Includes sales for public street and highway lighting, to public authorities, railroads and railways, and interdepartmental sales.

² Includes Bundled and Unbundled Consumers

Table 9.5 - Production, Operation, and Maintenance Expenses for Major U.S. Investor-Owned and Publicly Owned Utilities

(Million Dollars)

	Investor-Owned Utilities		Publicly Owned Utilities	
	<u>1995</u>	<u>1999</u>	<u>1995</u>	<u>1999</u>
Production Expenses				
Cost of Fuel	29,122	29,826	5,664	6,259
Purchased Power	29,981	43,258	11,988	13,587
Other Production Expenses	9,880	10,470	212	189
Total Production Expenses	68,983	83,555	17,863	20,027
Operation and Maintenance Expenses				
Transmission Expenses	1,425	2,423	788	906
Distribution Expenses	2,561	2,956	1,274	1,521
Customer Accounts Expenses	3,613	4,195	448	557
Customer Service and Information Expenses	1,922	1,889	120	182
Sales Expenses	348	492	29	63
Administrative and General Expenses	13,028	12,951	2,128	1,962
Total Electric Operation and Maintenance Expenses	22,898	24,906	22,651	25,218

Sources: EIA, *Electric Power Annual 1999*, Volume 2, Data Tables, Tables 11 and 13, http://www.eia.doe.gov/cneaf/electricity/epav2/epav2_texttabs.html and EIA, Financial Statistics of Major U.S. Publicly Owned Electric Utilities 1999 Data Tables, Tables 10 and 21, http://www.eia.doe.gov/cneaf/electricity/public/pub_h_tabs.html.

Note: Includes publicly owned generator and nongenerator electric utilities.

Table 9.5a - Operation and Maintenance Expenses for Major U.S. Investor-Owned Electric Utilities

(Million Dollars, unless otherwise indicated)

	<u>1995</u>	<u>1999</u>
Utility Operating Expenses	165,321	182,258
Electric Utility	150,599	167,266
Operation	91,881	108,461
Production	68,983	83,555
Cost of Fuel	29,122	29,826
Purchased Power	29,981	43,258
Other	9,880	10,470
Transmission	1,425	2,423
Distribution	2,561	2,956
Customer Accounts	3,613	4,195
Customer Service	1,922	1,889
Sales	348	492
Administrative and General	13,028	12,951
Maintenance	11,767	12,276
Depreciation	19,885	23,968
Taxes and Other	27,065	22,561
Other Utility	14,722	14,992
Operation (Mills per Kilowatthour) ¹		
Nuclear	9.43	8.93
Fossil Steam	2.38	2.21
Hydroelectric & Pumped Storage	3.69	4.17
Gas Turbine and Small Scale ²	3.57	5.16
Maintenance (Mills per Kilowatthour) ¹		
Nuclear	5.21	5.13
Fossil Steam	2.65	2.38
Hydroelectric & Pumped Storage	2.19	2.6
Gas Turbine and Small Scale ²	4.28	4.8

Source: EIA, *Electric Power Annual 1999*, Volume 2, Data Tables, Tables 11 and 13, http://www.eia.doe.gov/cneaf/electricity/epav2/epav2_texttabs.html.

Notes:

¹ Operation and maintenance expenses are averages, weighed by net generation.

² Includes gas turbine, internal combustion, photovoltaic, and wind plants.

Table 9.5b - Operation and Maintenance Expenses for Major U.S. Publicly Owned Generator and Nongenerator Electric Utilities

(Million Dollars, except employees)

	<u>1995</u>	<u>1999</u>	<u>2000</u>
Production Expenses			
Steam Power Generation	3,895	4,281	5,420
Nuclear Power Generation	1,277	1,292	1,347
Hydraulic Power Generation	261	281	332
Other Power Generation	231	405	603
Purchased Power	11,988	13,587	16,481
Other Production Expenses	212	189	225
Total Production Expenses	17,863	20,027	24,398
Operation and Maintenance Expenses			
Transmission Expenses	788	906	982
Distribution Expenses	1,274	1,521	1,646
Customer Accounts Expenses	448	557	662
Customer Service and Information Expenses	120	182	233
Sales Expenses	29	63	82
Administrative and General Expenses	2,128	1,962	2,116
Total Electric Operation and Maintenance Expenses	22,651	17,072	30,100
Fuel Expenses in Operation			
Steam Power Generation	2,163	2,871	4,150
Nuclear Power Generation	222	333	316
Other Power Generation	101	189	373
Total Electric Department Employees¹	73,172	71,265	71,353

Source: EIA, *Financial Statistics of Major U.S. Publicly-Owned Electric Utilities* 1999 Data Tables, Tables 10 and 21, http://www.eia.doe.gov/cneaf/electricity/public/pub_h_tabs.html.

Notes:

¹ Number of employees were not submitted by some publicly owned electric utilities because the number of electric utility employees could not be separated from the other municipal employees or the electric utility outsourced much of the work.

Table 9.6 - Environmental Compliance Equipment Costs

	<u>1990</u>	<u>1995</u>	<u>1999</u>	<u>2000</u>	<u>2010</u>	<u>2020</u>
Average Flue Gas Desulfurization Costs at Utilities						
Average Operation & Maintenance Costs (mills/kWh)	1.35	1.16	1.13	N/A	N/A	N/A
Average Installed Costs (\$/kW)	118	126	125	N/A	N/A	N/A

Source: EIA, *Electric Power Annual 1999* Volume 2, DOE/EIA-0348(99)/2, (October 2000), Table 29.